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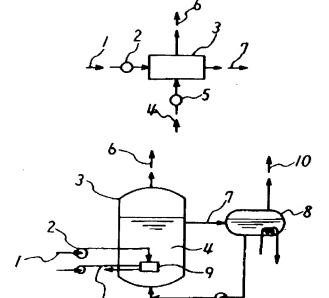
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TITLE

SEPARATION OF HIGH-BOILING

**HYDROCARBON** 



ABSTRACT :

PURPOSE: To separate inexpensively and simply high-boiling hydrocarbons such as 2~4C alkyls, etc. contained in mixed light hydrocarbons such as liquefied natural gas, etc. as inclusion compounds and to use them effectively, by bringing directly the mixed light hydrocarbons into contact with water.

CONSTITUTION: The mixed light hydrocarbons 1 such as liquefied natural gas (LNG), etc. is directly brought into contact with the water 4 such as seawater, etc. under pressure preferably ≥1kg/cm<sup>2</sup>.g, high-boiling components such as ethane, butane, and propane, etc. contained in the hydrocarbon 1 are processed into the inclusion compounds(hydrate) 7, so that they are simply separated from low-boiling components using effectively physical properties of LNG and seawater, etc. without using large energy like rectification and large-scale sevices. In the process, the amount of formation of the hydrate and its composition can be adjusted by controlling the pressure, temperature and retention time of the crystallizer 3, the vaporization of LNG and the separation of the high-boiling components can be carried out simultaneously.

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